

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

U.S. STEEL, FAIRFIELD WORKS,
CONTINUOUS CASTER
Birmingham Industrial District
N. of Valley Rd. W. of Ensley,
Pleasant Grove Rd.
Fairfield
Jefferson County
Alabama

HAER No. AL-37-C

HAER
ALA
37-FAIRF
3C-

INDEX TO BLACK AND WHITE PHOTOGRAPHS

NOTE: Photographs were taken by Jet Lowe, Fall 1993.

- AL-37-C-1 INTERIOR OVERVIEW OF CONTINUOUS CASTER WITH NO. 12 LADLE. MOLTEN STEEL IS POURED FROM LADLE THROUGH SHROUD TO TUNDISH. FROM TUNDISH STEEL ENTERS MOLD THROUGH SHROUD AND FORMATION OF SLAB SHELL BEGINS. AS SLAB PROGRESSES THROUGH CONTAINMENT SECTION IT IS COOLED WITH AIR MIST SPRAYS AND CONTINUES SOLIDIFICATION. UPON EXITING THE MACHINE THE SLABS ARE CUT TO DESIRED LENGTH AND IDENTIFIED. THE SLABS ARE STACKED, REMOVED FROM MACHINE AND PREPARED FOR SHIPMENT TO HOT STRIP MILL. CASTER HAS ABILITY TO PRODUCE SINGLE OR TWIN CASTS. SINGLE SLABS PRODUCED MAY BE UP TO 102 INCHES; DOUBLE SLABS UP TO 49 INCHES.
- AL-37-C-2 INTERIOR OVERVIEW WITH TRANSFER FROM LADLE TO TUNDISH. THE NO. 12 LADLE, PICTURED IN POURING POSITION (TOP CENTER), POURS MOLTEN IRON, TRANSFERRED FROM THE Q-BOP FURNACES, INTO THE TUNDISH.
- AL-37-C-3 CONTAINMENT SYSTEM, SPRAY CHAMBER, LOOKING NORTH WITH MIST COOLING MOLTEN STEEL SLABS AS THEY PROGRESS THROUGH THIS CHAMBER.
- AL-37-C-4 TENDING THE MOLD, DURING THE TRANSFER FROM TUNDISH TO MOLD TO CONTAINMENT CHAMBER IS CONTINUOUS CASTING OPERATOR, CALVIN ANDERS.
- AL-37-C-5 OVERVIEW LOOKING SOUTH OF CONTAINMENT SYSTEM (TOP), SLAB CASTING MACHINE AND RUN OUT WITH TRAVELLING TORCH. MACHINE IS CASTING IN TWIN MOLD.

U.S. STEEL, FAIRFIELD WORKS,
CONTINUOUS CASTER
HAER No. AL-37-C
INDEX TO PHOTOGRAPHS
(Page 2)

- AL-37-C-6 MULTIPLE SETS OF TWIN SLABS ON THE RUN OUT. THE RUN OUT INCLUDES THE TRAVELING TORCH WHICH CUTS SLABS TO DESIRED LENGTH, AN IDENTIFICATION SYSTEM TO INDICATE HEAT NUMBER AND TRACE IDENTITY OF EVERY SLAB, AND A DEBURRING DEVICE TO SMOOTH SLABS. AT LEFT OF ROLLS IS THE DUMMY BAR. DUMMY BAR IS INSERTED UP THROUGH CONTAINMENT SECTION INTO MOLD PRIOR TO START OF CAST. WHEN STEEL IS INTRODUCED INTO MOLD IT CONNECTS WITH BAR AS CAST BEGINS, AT RUN OUT DUMMY BAR DISCONNECTS AND IS STORED.
- AL-37-C-7 KRESS CARRIER SLAB HAULER, LOOKING NORTH, TRANSPORTS STEEL SLABS FROM CONTINUOUS CASTING OPERATION TO HOT STRIP MILL
- AL-37-C-8 KRESS CARRIER SLAB HAULER, LOOKING NORTH, TRANSPORTS STEEL SLABS FROM CONTINUOUS CASTING OPERATION TO HOT STRIP MILL

INDEX TO COLOR TRANSPARENCIES

All color xerographic copies were made from a duplicate color transparency.

NOTE: Photographs were taken by Jet Lowe, Fall 1993.

- AL-37-C-9 (CT) MULTIPLE SETS OF TWIN SLABS ON THE RUN OUT. THE RUN OUT INCLUDES THE TRAVELING TORCH WHICH CUTS SLABS TO DESIRED LENGTH, AN IDENTIFICATION SYSTEM TO INDICATE HEAT NUMBER AND TRACE IDENTITY OF EVERY SLAB, AND A DEBURRING DEVICE TO SMOOTH SLABS. AT LEFT OF ROLLS IS THE DUMMY BAR. DUMMY BAR IS INSERTED UP THROUGH CONTAINMENT SECTION INTO MOLD PRIOR TO START OF CAST. WHEN STEEL IS INTRODUCED INTO MOLD IT CONNECTS WITH BAR AS CAST BEGINS, AT RUN OUT DUMMY BAR DISCONNECTS AND IS STORED.